

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (original): A method for producing a bag with a mouth member by melt-bonding a tubular mouth member comprising a thermoplastic resin and a bag unit comprising a flexible film, said method comprising preheating the tubular mouth member while rotating it around the cylinder axis thereof, inserting the heated mouth member into an opening part of the bag unit and pressing and thereby melt-bonding the mouth member to the opening part of the bag unit.
2. (original): The method for producing a bag with a mouth member as claimed in claim 1, wherein the preheating is performed by radiant heat.
3. (original): The method for producing a bag with a mouth member as claimed in claim 1, wherein in the course of inserting the heated mouth member into the opening part of the bag unit and pressing melt-bonding, the inside of the bag unit is decompressed by sucking out air inside the bag unit.
4. (original): The method for producing a bag with a mouth member as claimed in claim 1, wherein the bag with a mouth member is produced by making a mouth member-rotator travel through a circuit of preheating wherein the mouth member is set on a mouth member-rotator and

heated while rotating, and melt-bonding wherein said mouth member on the mouth member-rotator is melt-bonded to the opening part of a bag unit, cooled and removed together with the bag as a bag with a mouth member.

5. (currently amended): A bag with a mouth member produced by the production method of a bag with a mouth member claimed in claim 1 ~~any one of claims 1 to 4~~.

6. (original): An apparatus for producing a bag with a mouth member by melt-bonding a tubular mouth member comprising a thermoplastic resin and a bag unit comprising a flexible film, said apparatus comprising a preheater for the mouth member, and a mouth member-rotator for rotating the heated tubular mouth member around the cylinder axis of said mouth member.

7. (original): An apparatus for producing a bag with a mouth member by melt-bonding a tubular mouth member comprising a thermoplastic resin and a bag unit comprising a flexible film, said apparatus comprising a mouth member-rotator for rotating a tubular mouth member around the cylinder axis of said mouth member, a mouth member supplier for supplying and setting a mouth member to said rotator, a preheater for the rotating mouth member, a melt bonding device for inserting the heated mouth member into the opening part of a bag unit and pressing and, thereby, melt-bonding the mouth member and the opening part of the bag unit, a cooler for the melt-bonded bag with a mouth member, and a removing device for removing the cooled bag with a mouth member.

8. (currently amended): The apparatus for producing a bag with a mouth member as claimed in claim ~~6- or 7~~, wherein the mouth member-rotator comprises a support member for slidably supporting a mouth member, a support member basal end part for removably fixing the non-heated part of the mouth member to the support member, and a driven unit for rotating the mouth member.

9. (currently amended): The apparatus for producing a bag with a mouth member as claimed in claim ~~6- or 7~~, wherein the mouth rotator is fitted to be moved sequentially through a circuit of mouth member supplying, preheating, melt-bonding, cooling, and removing the bag with a mouth member.

10. (currently amended): The apparatus for producing a bag with a mouth member as claimed in claim ~~6- or 7~~, wherein the heat source of the preheater has a linear shape.

11. (currently amended): The apparatus for producing a bag with a mouth member as claimed in claim ~~6- or 7~~, wherein the heat source of the preheater comprises a pair of opposing heat sources.

12. (currently amended): The apparatus for producing a bag with a mouth member as claimed in claim ~~6- or 7~~, wherein the mouth member-rotator has a duct for sucking out the air inside the bag with a mouth member.

13. (new): A bag with a mouth member produced by the production method of a bag with a mouth member claimed in claim 2.

14. (new): A bag with a mouth member produced by the production method of a bag with a mouth member claimed in claim 3.

15. (new): A bag with a mouth member produced by the production method of a bag with a mouth member claimed in claim 4.

16. (new): The apparatus for producing a bag with a mouth member as claimed in claim 7, wherein the mouth member-rotator comprises a support member for slidably supporting a mouth member, a support member basal end part for removably fixing the non-heated part of the mouth member to the support member, and a driven unit for rotating the mouth member.

17. (new): The apparatus for producing a bag with a mouth member as claimed in claim 7, wherein the mouth rotator is fitted to be moved sequentially through a circuit of mouth member supplying, preheating, melt-bonding, cooling, and removing the bag with a mouth member.

18. (new): The apparatus for producing a bag with a mouth member as claimed in claim 7, wherein the heat source of the preheater has a linear shape.

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19. (new): The apparatus for producing a bag with a mouth member as claimed in claim 7, wherein the heat source of the preheater comprises a pair of opposing heat sources.

20. (new): The apparatus for producing a bag with a mouth member as claimed in claim 7, wherein the mouth member-rotator has a duct for sucking out the air inside the bag with a mouth member.